#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018693 Address: 333 Burma Road **Date Inspected:** 28-Nov-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Tower and OBG Components

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

#### **OBG** Trial Assembly Area

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

SMAW welding of temporary alignment plates outside on PCMK OBG 11EW/12AW, edge plate to edge plate, south (crossbeam) side. Welder was identified as 500409. QC's were identified as ZPMC CWI An Qing Xiang (QC1) and ZPMC CWI Li Yang (QC2). Welding variables recorded by QC2 appeared to comply with WPS-B-P-2112.

Arc strike on the deck plate located on PCMK OBG 11EW, 1.85M west of the 11EW/12AW transverse joint and 2. 85M north of the south (crossbeam) side edge plate. The arc strike was immediately marked in soapstone with the notation G+MT by QC2 when notified by this QA Inspector. This QA Inspector clearly marked the visual indication in yellow paint with G+MT, signifying 'grind smooth and magnetic particle test'. See the photo below. QC1 informed this QA Inspector that the arc strike would be corrected in a manner compliant with the relevent contract documents.

ZPMC personnel match drilling web plate of PCMK OBG 11DE (FL3)/CB16, panel point 104 and 106 at previously scoreded pilot holes, using magnetically-held drill presses.

#### Heavy Dock

# WELDING INSPECTION REPORT

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This QA Inspector randomly observed the following on the Heavy Dock:

The east, west, and south towers, lift 4 were positioned vertically on a base pedestal at end of the Heavy Dock. The ZPMC 4000 ton floating crane was moored to the end of the Heavy Dock and rigged to the top of north tower, lift4 with the bottom touching on the deck of the Heavy Dock. ZPMC workers were removing temporary bolt sets at the bottom of skin C and skin D, working both inside and outside of the shaft. The 4000 ton floating crane then lifted the north tower shaft, lift 4 and slowly lowered the shaft to a horizontal position onto stanchions on the Heavy Dock.

#### Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

ZPMC personnel match drilling into PCMK Tower, lift 5 connection plates through previously scored pilot holes, using magnetically-held drill presses.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



#### **Summary of Conversations:**

As noted above.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Goulet,George	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer